

**REMARKS**

In the Office Action, pending claims 1-15, 18-33, 36-43, and 46-48 were rejected. In view of the following remarks, reconsideration and allowance of all pending claims are requested.

**Rejections Under 35 U.S.C. § 112**

The Examiner rejected claims 1-15, 18-33, 36-43, and 46-48 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Specifically, the Examiner stated:

Claims 1, 20, 38, and 46-48 have been rewritten to include a proviso statement that the chemically treated solid oxide must be devoid of titanium. There is nothing on page 25 of the specification that makes such a claim. Claims 46-48 also provide a listing of metallocenes that are excluded from claimed process. The structures revealed on pages 11-13 of the specification clearly show that all compounds listed in claims 46-48, except nonylphenylsilyl***bis***(1-indenyl)hafnium dichloride, are preferred embodiments of the invention.

Corresponding dependant claims are subsumed under the rejection.

Office Action ,page 2. Applicants respectfully traverse these rejections.

***I. Legal Precedent and Guidelines***

Regarding the written description requirement, the initial burden of proof regarding the sufficiency of the written description falls on the Examiner. Accordingly, the Examiner must present evidence or reasons why persons skilled in the art would not

recognize a description of the claimed subject matter in the applicant's disclosure. *In re Wertheim*, 191 U.S.P.Q. 90, 96 (C.C.P.A. 1976). The fundamental factual inquiry with regard to the written description requirement is whether the specification conveys with reasonable clarity to those of ordinary skill in the art that, as of the filing date sought, applicant was in possession of the claimed invention. *See, e.g., Vas-Cath, Inc. v. Mahurkar*, 19 U.S.P.Q. 2d 1111, 1117 (Fed. Cir. 1991). Furthermore, "[t]he 'written description' requirement must be applied in the context of the particular invention and the state of the knowledge." *See Capon v. Eshar*, 76 U.S.P.Q.2d 1078, 1085 (Fed. Cir. 2005).

While some older courts were critical of negative limitations, the "current view of the courts is that there is nothing inherently ambiguous or uncertain about a negative limitation." M.P.E.P. § 2173.05(i), p. 2100-211 (Rev. 5, August 2006). Moreover, word-for-word literal support in the specification is not required for negative claim limitations, if the specification conveys that the applicants had possession of the concept at the time of filing. *See Ex parte Parks*, 30 U.S.P.Q.2d 1234, 1236 (B.P.A.I. 1993). For example, "[i]f *alternative* elements are *positively recited* in a specification they may be explicitly *excluded* in the claims." M.P.E.P. § 2173.05(i)(emphasis added). Indeed, it has long been held that an applicant is entitled to claim "less than the full scope of his disclosure." *In re Johnson*, 194 U.S.P.Q. 187, 195 (C.C.P.A. 1971).

## ***II. Deficiencies of the Rejection***

The Examiner rejected claims 1, 20, 38, and 46-48 because they expressly exclude the metal titanium and rejected claims 46-48 because they expressly exclude a list of ten specific metallocenes. *See* Office Action, page 2.

Apparently, the Examiner contended that there must be word-for-word literal support in the written description for a negative limitation in a claim. *See* Office Action, page 2 (citing pages 11-13 and 25 of the present specification). In other words, the Examiner is apparently contending that the specification must *explicitly* list items that may be excluded. However, as indicated, word-for-word literal support in the description for a negative claim limitation is not required. *See, e.g.*, M.P.E.P. § 2173.05(i) (citing *Ex parte Parks*, 30 U.S.P.Q.2d 1234, 1236 (Bd. Pat. App. & Inter. 1993)). Indeed, as discussed above in the legal precedent section, “[i]f alternative elements are positively recited in a specification they may be explicitly excluded in the claims.” M.P.E.P. § 2173.05(i).

Applicants respectfully note that the Examiner’s reliance on *Ex Parte Grasselli* is misplaced. *See* Office Action, page 2. In *Ex parte Grasselli*, unlike the present case, no support existed in the written description for amendments to the claims that added negative limitations. The applicant (Grasselli) excluded elements that were not mentioned in the written description, as filed. *See Ex parte Grasselli*, 231 U.S.P.Q. at 393-94. For example, Grasselli expressly excluded uranium from the claims but there was no mention (positive or negative) of uranium or related components in the

specification. *See id.* For this reason the board upheld a rejection under Section 112, explaining that the amendment to exclude uranium introduced a new concept. *See id.* In contrast, in the present case the specification mentions titanium as an alternative component in the solid oxide, and therefore, it is entirely appropriate that Applicant amend the present claims to exclude titanium.

Applicants respectfully note that *In re Johnson* is more applicable to the present case. In *In re Johnson*, the patent application specification at issue disclosed over fifty alternate choices that could be used for the precursor compounds. *See In re Johnson*, 194 U.S.P.Q. at 195. The applicants specifically excluded two of these choices from the patent protection sought. *See id.* at 191. The court held that the applicants were entitled to limit the claims to those disclosed alternatives not covered by the prior art. *See id.* at 196 (“It is for the inventor to decide what *bounds* of protection he will seek.”) (emphasis in original).

***A. The Specification Lists Titanium***

Here, the present written description expressly lists numerous metals, including titanium, as options that may be included in the solid oxide formulations of the claimed process. *See Specification*, page 27, ll. 5-7 (“In one aspect of this invention, the chemically-treated solid oxide further comprises a metal or metal ion selected from zinc, nickel, vanadium, *titanium*, silver, copper, gallium, tin, tungsten, molybdenum, or any combination thereof.”) (emphasis added). Thus, the claim element “wherein the at least

one chemically-treated solid oxide is substantially free of titanium” recited in claims 1, 20, 38, and 46-48 is plainly a valid exclusionary proviso that finds full support in the specification. As such, Applicants respectfully assert that claims 1, 20, 38, and 46-48 clearly comply with 35 U.S.C. § 112.

***B. The Specification Lists Excluded Metallocenes***

The present application specifically lists nine of the ten metallocenes expressly excluded from the subject matter of claims 46-48. *See* Specification, pages 11-17 (listing twenty six alternative metallocenes that may be used in embodiments of the current invention). As discussed above, an applicant may explicitly exclude any element positively recited in the specification. Thus, the exclusionary proviso contained in claims 46-48 is valid with respect to these nine metallocenes.

As for the remaining excluded metallocene, nonylphenylsilylbis(1-indenyl) hafnium dichloride, the specification also provides a context for its exclusion. The specification includes a genus with the generic formula  $R_2^1$  silylbis(1-indenyl) hafnium dichloride, “where  $R^1$  in each instance is independently selected from a linear, branched, substituted, or unsubstituted hydrocarbyl group, any one of which having from 1 to about 30 carbons.” *See* Specification, page 10, lines 17-20. From this description, one of ordinary skill in the art would recognize that the Applicant had possession of nonylphenylsilylbis(1-indenyl) hafnium dichloride. Thus, one of ordinary skill in the art would recognize a description of the subject matter of claims 46-48 in the present

disclosure. *See In re Wertheim*, 191 U.S.P.Q., at 96 ("It is not necessary that the application describe the claim limitations exactly . . . but only so clearly that persons of ordinary skill in the art will recognize from the disclosure that that appellants invented process including those limitations.") (internal citation omitted).

For the reasons discussed above, applicants respectfully assert that the exclusionary proviso contained in claims 46-48 is valid with respect to all ten of the metallocenes listed. As such, claims 46-48 clearly comply with the written description requirement of 35 U.S.C. § 112.

***Request Withdrawal of Rejection***

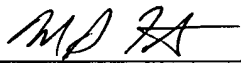
In view of the foregoing discussion, Applicants respectfully stress that that the present application satisfied the written description requirement. Applicants believe claims 1, 20, 38, and 46-48, and their dependent claims, to be in condition for allowance. Applicants respectfully request that the Examiner withdraw the rejection of claims 1-15, 18-33, 36-43, and 46-48 under 35 U.S.C. § 112, first paragraph, and allow the claims.

**Conclusion**

In view of the remarks set forth above, Applicants respectfully request allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

Date: November 30, 2006

  
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